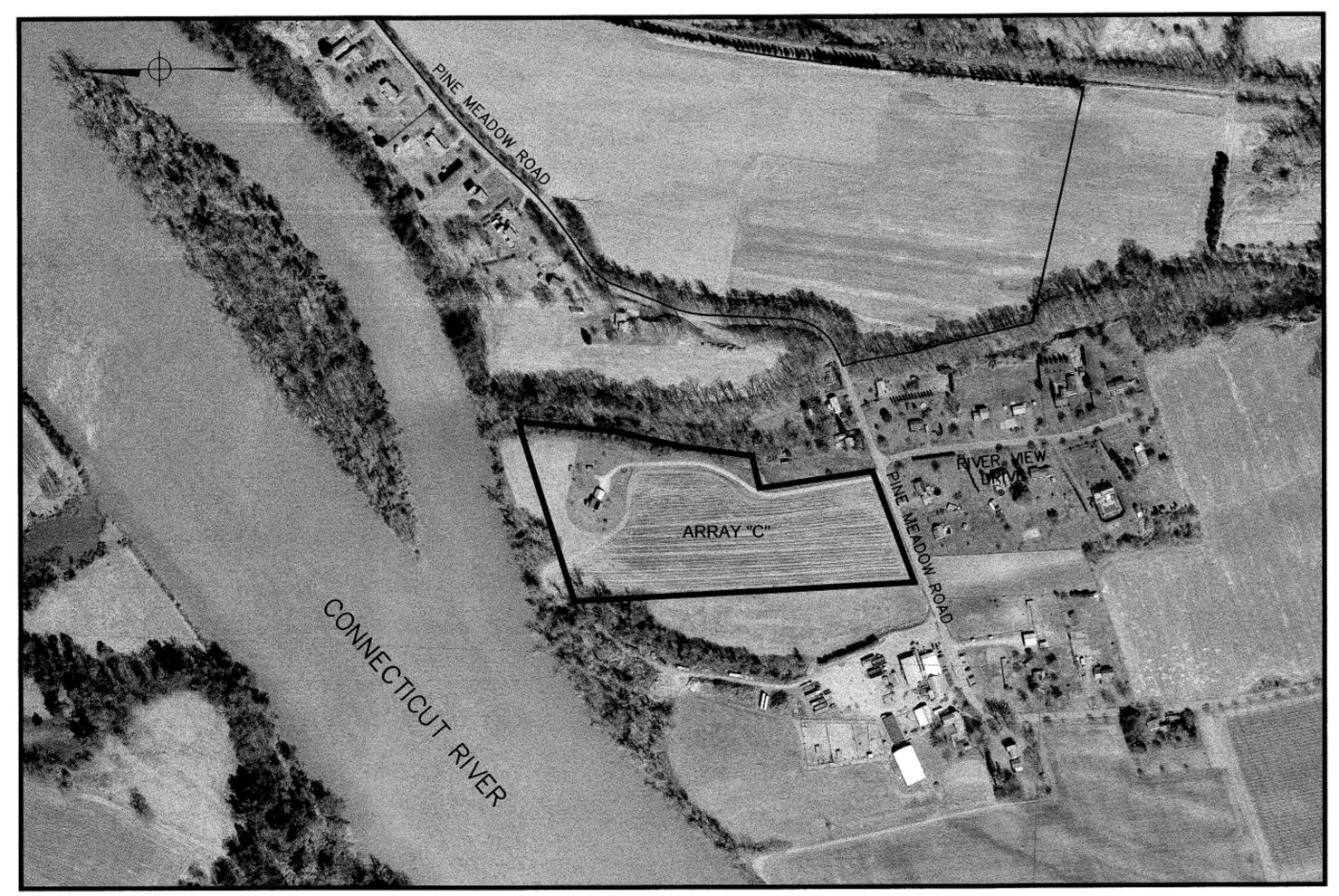
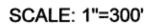
PROPOSED PINE MEADOW ROAD SOLAR ARRAY "C" SITE DRAWINGS BWC OTTER RUN LLC

ISSUED FOR: PERMITTING DATE ISSUED: 12/28/2020 LATEST ISSUE:

612 PINE MEADOW ROAD NORTHFIELD, MASSACHUSETTS





APPLICANT:

FIELD ENGINEERING CO., INC. 11D INDUSTRIAL DRIVE P.O. BOX 1178 MATTAPOISETT, MASSACHUSETTS

ENGINEER:

BWC OTTER RUN LLC 111 HUNTINGTON AVENUE, SUITE 650 BOSTON, MASSACHUSETTS 02199

OWNERS:

PARCEL ID: 54 A8 JACOB LETOILE & ROBIN LETOILE 612 PINE MEADOW RD NORTHFIELD, MA 01360

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| LOT NO. | OWNER OF RECORD |
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| 54 A1 1 | FIRSTLIGHT MA HYDRO LLC |
| 54 A5.1 1 | PEGGY KOCORAS |
| 54 A6 1 | DAVID R HOWES |
| 54 A7 1 | ANDREY VDOVICHENKO & OLGA VDOVICHENKO |
| 54 A8.1 1 | GARY J DOUGLAS & JEAN A DOUGLAS |
| 54 A9 1 | FIRSTLIGHT MA HYDRO LLC |
| 54 A10 1 | FIRSTLIGHT MA HYDRO LLC |
| 54 A12 1 | DANIEL L WHITNEY |
| 54 B1.01 1 | FELIX L RAMOS & SANDRA RAMOS |
| 54 B1.02 1 | JAMIE A BRUNACCIONI & ANDREA L BRUNACCIONI |
| 54 B1.03 1 | JEFFREY A LASHIER & LISA M LASHIER |
| 54 B1.04 1 | ROBERT H MACEWEN JR |
| 54 B1.05 1 | TIMOTHY A WALDRON & MELANIE L WALDRON |
| 54 B2.2 1 | DANIEL L WHITNEY |
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SCALE: 1"=500'

PROJECT LOCATION:

PARCEL 54 A8 NORTHFIELD, MASSACHUSETTS

PROPOSED PINE MEADOW ROAD SOLAR ARRAY "C"

PARCEL 54 A8 612 PINE MEADOW ROAD NORTHFIELD, MA



MGINEERING
CO., INC.
CONSULTING ENGINEERS

11D INDUSTRIAL DRIVE P.O. BOX 1178 MATTAPOISETT, MA 02739 TEL: (508) 758-2749 FAX: (508) 758-2849

GENERAL CONSTRUCTION NOTES

- 1. THE MATERIALS AND CONSTRUCTION OF ALL THE PROPOSED STORM DRAINAGE UTILITIES SHALL CONFORM TO THE SPECIFICATIONS SHOWN HEREIN AS WELL AS ALL APPLICABLE MASSDOT STANDARDS AND SPECIFICATIONS, LATEST EDITION. THE MATERIALS AND CONSTRUCTION OF ALL ELECTRIC, TELEPHONE & CATV UTILITIES SHALL CONFORM TO THE SPECIFICATIONS OF EACH RESPECTIVE PUBLIC UTILITY PROVIDER.
- 2. ALL CONSTRUCTION MATERIALS, AS WELL AS ALL MATERIAL SHOP DRAWINGS AND MANUFACTURERS DATA SHALL RECEIVE THE WRITTEN APPROVAL OF THE THE PROJECT ENGINEER PRIOR TO FABRICATION AND INSTALLATION.
- THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, UNDERGROUND UTILITIES SHOWN ARE FROM FIELD OBSERVATION AND THE BEST AVAILABLE RECORD INFORMATION AND ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATION AND ELEVATION OF ALL EXISTING LINES.
- 4. THE CONTRACTOR SHALL CONTACT "DIG SAFE" AT 1-800-322-4844, 72 HOURS PRIOR TO ANY EXCAVATION AND/OR SUBSURFACE TESTING TO INFORM THE UTILITY COMPANIES OF ANY EXCAVATION.
- 5. WHENEVER EXISTING STRUCTURES ARE ENCOUNTERED, THE CONTRACTOR SHALL REPAIR ANY DAMAGED STRUCTURES OR REPLACE ANY REMOVED STRUCTURES, AND MAKE ANY IMPROVEMENTS ABOVE OR BELOW GRADE TO A CONDITION BETTER THAN OR EQUAL TO PRE-EXISTING CONDITIONS.
- 6. ALL EXCAVATED MATERIAL DESIGNATED FOR REUSE SHALL BE STOCKPILED ON SITE NO HIGHER THAN 8 FEET AND SHALL BE ENCLOSED BY TEMPORARY SILT FENCES TO PREVENT TRAVEL OF SEDIMENT TO ADJACENT PROPERTIES OR
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL WASTE MATERIAL AT AN APPROVED LOCATION.
- 8. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND MAINTAINED IN GOOD CONDITION UNTIL SURFACE RESTORATION IS COMPLETE AND ALL AREAS DISTURBED BY THE CONTRACTORS OPERATIONS ARE STABILIZED.
- 9. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES FROM ON SITE CONSTRUCTION ACTIVITIES AND REMOVE ANY DRAINAGE GENERATED AS A RESULT OF TRENCH DEWATERING SHALL BE DISCHARGED TO EXISTING DRAINAGE
- COURSES WITH PROPER EROSION CONTROL AND DEWATERING MEASURES MEASURES SUBJECT TO APPROVAL BY THE PROJECT ENGINEER, DIRECT DISCHARGE ONTO PAVEMENT, WETLANDS OR PRIVATE PROPERTY SHALL NOT BE ALLOWED WITHOUT CONSENT OF THE PROJECT ENGINEER AND THE OWNER. 11. THE OWNER AND THE PROJECT ENGINEER SHALL APPROVE ALL FIELD CHANGES IN THE WORK PRIOR TO IMPLEMENTATION. NO FIELD CHANGES SHALL BE MADE IN ANY SPECIFIED SITE WORK OR ANY MATERIALS FOR WHICH SHOP DRAWINGS HAVE BEEN SUBMITTED AND APPROVED WITHOUT PRIOR CONSULTATION OF THE OWNER AND THE
- SHALL, IF DEEMED UNACCEPTABLE BY EITHER PARTY, BE PROMPTLY REMOVED FROM THE WORK AT NO EXPENSE TO THE OWNER OF THE PROJECT. 12. ANY WORK OR MATERIALS NOT MEETING THE APPROVED STANDARDS AND SPECIFICATIONS OF THE LOCAL DEPT. OF

PUBLIC WORKS SHALL BE IMMEDIATELY REMOVED AND REPLACED AT THE FULL RESPONSIBILITY AND COST/EXPENSE TO

PROJECT ENGINEER. ANY CHANGES SO MADE WITHOUT THE CONSENT OF THE OWNER AND THE PROJECT ENGINEER

- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE PREPARATION, THE COORDINATION AND INSTALLATION OF ALL UTILITY CONNECTIONS, AND RELATED WORK INCLUDING BUT NOT LIMITED TO ALL NECESSARY SHORING, BRACING AND TRENCH DEWATERING FOR THE COMPLETE INSTALLATION OF THE PROJECT FACILITIES DURING CONSTRUCTION.
- 14. ALL OPEN EXCAVATIONS SHALL BE ADEQUATELY SAFEGUARDED IN STRICT ACCORDANCE WITH OSHA GUIDELINES AND TO THE SATISFACTION OF THE LOCAL POLICE DEPARTMENT. PROVISIONS FOR TEMPORARY BARRICADES, CAUTION SIGNS, LIGHTS AND OTHER MEANS TO PREVENT ACCIDENTS AND DAMAGE TO PROPERTY ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE SUITABLE AND SAFE BRIDGES AND OTHER CROSSINGS FOR ACCOMMODATING TRAVEL BY PEDESTRIANS AND WORKMEN. NO EXCAVATIONS SHALL REMAIN OPEN OVERNIGHT.
- 15. REFER TO CONSTRUCTION DETAILS ON THIS SHEET FOR ADDITIONAL UTILITY REQUIREMENTS AND SPECIFICATIONS
- 16. THESE PLANS HAVE BEEN PREPARED SPECIFICALLY AS SUPPLEMENTAL INFORMATION TO ACCOMPANY APPLICABLE PERMIT APPLICATIONS AND ARE NOT INTENDED FOR ACTUAL CONSTRUCTION WITHOUT THE EXPRESSED WRITTEN
- 17. ALL SLOPES SHALL BE GRADED AT NO LESS THAN 2:1 UNLESS OTHERWISE SHOWN ON THE PLANS. LAND DISTURBING ACTIVITIES WITHIN ANY LANDSCAPE BUFFER LINES SHALL BE KEPT TO A MINIMUM. NO STOCKPILING OF RESIDUALS WILL BE ALLOWED WITHIN ANY LANDSCAPE BUFFER ZONE AREAS OR DESIGNATED NO DISTURBANCE AREAS.
- 18. NO EXTERIOR LIGHTING IS PROPOSED ON THIS PROJECT.

DECOMMISSIONING PLAN

FIELD ENGINEERING CO. INC. (FEC) HAS PREPARED THIS DECOMMISSIONING PLAN FOR THE PROPOSED 6.0 MW DC SOLAR ARRAY TO BE LOCATED AT PINE MEADOW ROAD NORTHFIELD, MASSACHUSETTS.

- ELECTRICAL EQUIPMENT WILL BE SOLD BACK TO THE MANUFACTURER OR TO RECYCLING FACILITY. • THE PROJECT CONTAINS LARGE AMOUNTS OF COPPER, ALUMINUM AND OTHER CONDUCTIVE METALS WHICH ARE EASILY
- ALL NON-RECYCLABLE MATERIALS WILL BE TAKEN TO THE NEAREST APPROVED LANDFILL FOR DISPOSAL.
- RESULTING DEPRESSIONS, VOIDS AND EXCAVATION AREAS WILL BE BACKFILLED, GRADED TO THE PROPER ELEVATION. · ALL DISTURBED AREAS ASSOCIATED WITH THE ARRAY WILL BE RE-VEGETATED IN EFFORT TO RETURN THE LANDSCAPE OF THE EARTH AS CLOSE TO ITS PREVIOUS STATE AS POSSIBLE. THIS INCLUDES THE GRAVEL ACCESS DRIVES WITHIN
- THE FENCED ARRAY AREA. HE GRAVEL ACCESS DRIVE INTO THE SITE WILL BE RETAINED FOR OWNER ACCESS TO THE PROPERTY,
- TRANSFORMERS, INVERTERS AND SWITCHGEAR WILL BE REMOVED FROM THEIR RESPECTIVE CONCRETE PADS. FENCING WILL BE ROLLED UP ON AN INDUSTRIAL SIZED SPOOL AND REMOVED FROM THE SITE.
- . PV PANELS WILL BE DETACHED FROM THE RACKING SYSTEM BY AND STACKED FOR REMOVAL.
- SECTIONS OF THE RACKING SYSTEM WILL BE SCISSORED TOGETHER AND STACKED FOR REMOVAL.
 SECTIONS OF THE RACKING SYSTEM WILL BE SCISSORED TOGETHER AND STACKED FOR REMOVAL.
 RACKING POSTS WILL BE TAKEN OUT OF THE GROUND USING AN EXCAVATOR OR FRONT—END LOADER.
 THE CONCRETE FOUNDATIONS FOR THE ENERGY STORAGE CONTAINERS, TRANSFORMERS AND SWITCHGEAR WILL BE LIFTED, SECURED ONTO FLAT BEDS, AND TRANSPORTED OFF—SITE FOR PROCESSING. · AC AND DC WIRING, AFTER PROPER DISCONNECTION, WILL BE PULLED OUT WITH AN EXCAVATOR.
- . ON SITE POWER POLES FOR ABOVE GROUND WIRING AT THE COLLECTOR SUBSTATION WILL DUG OUT AND REMOVED. . THE 13.2 KV ELECTRIC LINES WILL BE REMOVED BY THE LOCAL UTILITY AND ARE NOT THE SUBJECT OF THIS STUDY.
- CONCRETE THAT IS "CLEAN", MEANING IT DOESN'T HAVE SUBSTANTIAL AMOUNTS OF REBAR, WILL BE PROCESSED FREE OF

CHARGE UPON DELIVERY.

DECOMMISSIONING COST ESTIMATE

BASED ON PREVIOUS EXPERIENCE AND WORK ON A VARIETY OF DIFFERENT PROJECTS, WE HAVE DEVELOPED A DECOMMISSIONING COST ESTIMATE BASED ON THE FOLLOWING ASSUMPTIONS FOR LABOR AND EQUIPMENT COSTS:

- ASSUME 10 MINUTES PER PAIR OF MODULES TO CALCULATE LABOR COSTS FOR MODULE REMOVAL. ASSUME 8 MINUTES PER POST TO CALCULATE LABOR COSTS FOR POST REMOVAL.
 ASSUME 8 MINUTES PER POST TO CALCULATE EQUIPMENT COSTS ASSOCIATED WITH POST REMOVAL.
- THE CURRENT DECOMMISSIONING COST VALUES ARE ON FILE WITH THE NORTHFIELD PLANNING BOARD AS REQUIRED UNDER THE ZONING BY-LAW,

EROSION & SEDIMENTATION CONTROL PROGRAM

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE EXECUTED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS AND THE NPDES STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- 2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME, AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL IF THE DISTURBANCE IS WITHIN 100 FEET OF A WETLAND RESOURCE AREA. THE DISTURBED AREAS SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY FORECASTED
- 3. SEDIMENT BARRIERS (SILT FENCE, HAY BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE UPGRADIENT CONTRIBUTING DRAINAGE AREA. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 8.0% AFTER OCTOBER 1ST.
- 4. INSTALL SILT FENCE AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
- 5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL, SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT AND WHEN THE DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- 6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2 TO 1) UNLESS NOTED
- 7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH OR DORMANT SEEDING TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- 9. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL
- DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS A) ANY TOPSOIL TO BE PLACED FOR REVEGETATION MEASURES (WHETHER SCREENED ON-SITE OR IMPORTED) SHALL
- HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL BE PLACED TO A DEPTH OF FOUR (4) INCHES ON ALL LOAM
- B) APPLY FERTILIZER AND/OR LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT MANUFACTURER'S RECOMMENDED RATES.
- C) THE DESIGN MIXES FOR SEEDING SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLES. THE SEED MIX SHALL BE INOCULATED WITHIN TWENTY-FOUR (24) HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY. (ALTERNATIVE SEED MIXES SHALL BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO

LOAM AND SEED AREAS-CONSERVATION/WILDLIFE SEED MIX

SPECIES LIST:

APPLICATION RATE

VIRGINIA WILD RYE (ELYMUS VIRGINICUS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), PANICLEDLEAF TICK TREFOIL (DESMODIUM PANICULATUM), INDIAN GRASS (SORGHASTRUM NUTANS), BLUE VERVAIN (VERBENA HASTATA). BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA), BLACK EYED SUSAN (RUDBECKIA HIRTA), COMMON SNEEZEWEED (HELENIUM AUTUNALE), HEATH ASTER (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM),

EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).

10. HAY OR STRAW MULCH SHALL BE LOOSELY SPREAD TO A UNIFORM DEPTH AT THE RATE OF 4.5 TONS PER ACRI EXCEPT OVER CERTAIN SELECTED SEEDED AREAS WHERE 2 TONS PER ACRE SHALL BE USED AS DIRECTED BY THE ENGINEER AND/OR THE PLANNING BOARD. A HYDRO--APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON HAY MULCH FOR WIND

25 LBS./1 ACRE

11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED TO THE SATISFACTION OF THE PROJECT ENGINEER AND/OR THE CONSERVATION COMMISSION.

12. ADJACENT PROPERTIES WILL BE PROTECTED WITH HAY BALES AND/OR SILT FENCING INSTALLED AS SHOWN ON THE DRAWINGS. ADDITIONAL HAY BALES OR SAND BAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE PROJECT ENGINEER AND/OR THE CONSERVATION COMMISSION.

13 TEMPORARY HAY RALE FROSION CHECKS OR FILTER FARRIC CRATE INSERTS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURE IN ETS DURING CONSTRUCTION LIPON COMPLETION OF CONSTRUCTION AND SATISFACTORY STABILIZATION OF DISTURBED AREAS, THE CONTRACTOR SHALL CLEAN ALL CATCH BASIN SUMPS AND DRAIN INVERTS.

14. THE CONTRACTOR MUST REPAIR OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND SHALL DO SO AT NO ADDITIONAL EXPENSE TO THE OWNER.

15. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH JUNE 15TH AND AUGUST 15TH THROUGH SEPTEMBER 30TH.

16. STOCKPILES OF TOP SOIL SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER

MULCH AND MULCH ANCHORING

RATE. (1,000 S.F.) MULCH LOCATION MULCH MILD SLOPES LESS THAN 3:1 SHREDDED OR CHOPPED CORNSTALKS HIGH WIND VELOCITY AREAS 200-275 POUNDS ANCHORED STRAW OR HAY (1) 200 POUNDS JUTE MESH OR EXCELSIOR MAT MODERATE TO HIGH VELOCITY AREAS AS REQUIRED STEEP SLOPES GREATER THAN 3:1 JUTE MESH OR EXCELSIOR MAT AS REQUIRED

(1) A HYDRO-APPLICATION OF WOOD OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL.

MULCH ANCHORING

MULCH ANCHORING MAY BE ACCOMPLISHED WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (PER MANUFACTURERS SPECIFICATIONS); WOOD CELLULOSE FIBER (750 LBS/ACRE); OR CHEMICAL TACK (PER

EROSION CONTROL NOTES DURING CONSTRUCTION

- 1. CONSTRUCTION ACTIVITY EXECUTED DURING THE WINTER CONSTRUCTION PERIOD BETWEEN NOVEMBER 1 THROUGH APRIL 15 SHALL BE SUBJECT TO THE FOLLOWING ADDITIONAL REQUIREMENTS.
- 2. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED OR TEMPORARY STABILIZED IN ONE DAY PRIOR
- 3. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO AREA IN EXCESS OF ONE ACRE IS WITHOUT EROSION CONTROL PROTECTION.
- 4. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE
- 5. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE PERMITTED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES, THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED.
- IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200 TO 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER.
- UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF HAY BALE/SAND BAG CHECK DAMS.
- 6. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3%, FOR SLOPES EXPOSED TO DIRECT WINDS, AND FOR ALL OTHER SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER
- 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%. 7. ALL EROSION MITIGATION SHALL BE IN PLACE PRIOR TO ANY SOIL DISTURBANCE ACTIVITIES ON THE SITE.

STORMWATER FACILITY OPERATION/MAINTENANCE PLAN

PROPERTY OWNER: PARCEL ID: 54-A8 JACOB AND ROBIN L'ETOILE

612 PINE MEADOW RD NORTHFIELD, MA 01360 APPLICANT/PROPONENT:

BWC OTTER RUN LLC 111 HUNTINGTON AVENUE, SUITE 650 BOSTON, MASSACHUSETTS 02199

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES INCLUDING THE CONTINUED STABILIZATION OF THE SITE UNTIL SUCH TIME AS THE PROJECT IS ACCEPTED BY THE OWNER. THEREAFTER, THE OWNER SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ANY STORMWATER FACILITIES IN ACCORDANCE WITH THIS OPERATION AND MAINTENANCE PLAN.
- ALL STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S), INCLUDING THE SILTATION CONTROL, SHOULD BE INSPECTED AFTER EVERY MAJOR RAINFALL EVENT EXCEEDING 1.0-INCH UNTIL THE SITE IS FULLY STABILIZED TO ENSURE NO SEDIMENTATION INTO THE WETLANDS HAS OCCURRED.
- 3. THEREAFTER REGULAR BMP INSPECTIONS SHOULD BE CONDUCTED ACCORDING TO THE FOLLOWING SCHEDULE:
- BMP STRUCTURE INSPECTIONS PER YEAR CRUSHED STONE EDGE DRAIN TRENCHES
- 4. ACCUMULATED SILT AND SEDIMENT AHEAD OF THE SILTATION CONTROLS SHOULD BE REMOVED IF THE ACCUMULATED DEPTH OF SEDIMENT EXCEEDS ONE HALF OF THE HEIGHT OF THE STRUCTURE. ANY ACCUMULATED SILT WIITHIN THE DETENTION BASINS SHOULD BE REMOVED ONCE THE ACCUMULATED DEPTH OF SILT EXCEEDS THREE INCHES.
- 5. ALL REMOVED SEDIMENTS ARE TO BE PROPERLY DISPOSED OF AT A LOCATION TO BE APPROVED BY THE BOARD OF HEALTH. TRANSPORTATION AND DISPOSAL OF SEDIMENTS SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND
- FEDERAL REGULATIONS. AT ALL SITE ACCESS POINTS, SNOW REMOVAL WILL OCCUR AFTER SNOW EVENTS OF 4" OR MORE OR WHEN SNOW ACCUMULATION IN THESE AREAS IS GREATER THAN 4". COMPLETE PLOWING WITHIN 24 HOURS OF SUCH SNOW EVENT OR ACCUMULATION TRIGGER. NO SODIUM CHLORIDE, ROCK SALT OR CHEMICALS OF ANY KIND MAY BE USED ONSITE. INSIDE THE ARRAY AREA, SNOW WILL BE REMOVED AT THE CONCLUSION OF EACH SNOW EVENT ONCE THE AMOUNT HAS
- THE ACCESS DRIVEWAY SHALL BE MONITORED ON A REGULAR BASIS TO INSURE ITS SUITABILITY FOR ACCESS, GRAVEL ALONG THE ACCESS DRIVEWAY SHALL BE REPLACED AS NECESSARY TO MAINTAIN SUITABLE ACCESS TO THE ARRAY. IN ADDITION THE ENTIRE FACILITY SHALL BE MONITORED ON A REGULAR BASIS FOR ANY SIGNS OF EROSION DUE TO
- STORMWATER RUNOFF. ERODED AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE. 8. THE SITE SHALL BE MONITORED TO INSURE PROPOSED DRAINAGE PATTERNS ARE MAINTAINED FOLLOWING CONSTRUCTION. SHOULD CHANNEL FLOW FROM RUNOFF DEVELOP WITHIN THE SITE THAT REQUIRES CORRECTIVE MEASURES, THESE MEASURES SHALL BE REVIEWED WITH THE PLANNING BOARD PRIOR TO THEIR IMPLEMENTATION.
- 9. THE PROJECT SITE SHOULD BE INSPECTED FOR TRASH ON A REGULAR BASIS. ANY ACCUMULATED TRASH, LITTER, AND DISCARDED MATERIALS SHOULD BE REMOVED.
- 10. THE CONTRACTOR AND THE OWNER SHALL MAINTAIN A BMP INSPECTION REPORT FOLLOWING EACH SITE INSPECTION AS RECOMMENDED ABOVE. THE BMP INSPECTION REPORT SHALL IDENTIFY THE DATE OF INSPECTION, THE NAME AND CONTACT NUMBER OF THE RESPONSIBLE PARTY, SPECIFIC STRUCTURES INSPECTED, SPECIFIC MAINTENANCE REQUIRED AND OBSERVATIONS AT A MINIMUM, INSPECTION REPORTS SHOULD ADDRESS THE FOLLOWING CONDITIONS WHERE APPLICABLE:
 - 1.EMBANKMENT SUBSIDENCE

REACHED AN AMOUNT OF 12" DEPTH.

- 3. CRACKING OF CONTAINMENT BERM 4.INLET/OUTLET CONDITIONS
- 5. SEDIMENT ACCUMULATIONS 6. SLOPE STABILITY
- 11. NO HAZARDOUS MATERIALS SHALL BE STORED ON-SITE DURING AND/OR FOLLOWING CONSTRUCTION OF THE PROPOSED

SOLAR ENERGY EQUIPMENT O&M PLAN

- INSPECTIONS OF THE PERIMETER FENCE, SOLAR ARRAY, AND CONNECTING INFRASTRUCTURE WILL BE MADE TWO TO FOUR TIMES PER YEAR.
- 2. REPAIRS TO THE FACILITY INCLUDING THE FENCE, ACCESS ROAD, RACKS AND ELECTRICAL EQUIPMENT WILL BE MADE
- AS NEEDED. 3. ANY EROSION IN ACCESS ROADS SHALL BE REPAIRED AND STABILIZED AS NEEDED.
- 4. AN ANNUAL PREVENTATIVE MAINTENANCE VISIT WILL BE MADE BY TRAINED SOLAR TECHNICIANS, DURING THE ANNUAL MAINTENANCE VISIT, CONSUMABLES WITHIN THE INVERTER(S) WILL BE CHANGED, AND ALL KEY EQUIPMENT WILL BE
- 5. THE SYSTEM WILL BE REMOTELY MONITORED AT ALL TIMES FROM A NETWORK OPERATIONS CENTER ("NOC"). STAFF AT THE NOC WILL REVIEW PERFORMANCE REPORTS ON REGULAR BASIS. FAULT DETECTION PROGRAMS WILL NOTIFY THE NOC STAFF OF ANY MAJOR FAULTS ON A DAILY BASIS. THE NOC WILL DISPATCH TECHNICIAN'S TO THE SITE TO DIAGNOSE AND REPAIR ANY FAULTS.

VEGETATION MAINTENANCE PLAN

- VEGETATION WITHIN THE SOLAR ARRAY, UNDER AND AROUND THE ENERGY COLLECTING PANELS AND INSIDE THE PERIMETER FENCE SHALL BE MOWN PERIODICALLY.
- 2. AREAS OUTSIDE THE FENCE MAY CONTINUE TO BE MOWN OR BE MAINTAINED AS A SCRUB/SHRUB ENVIRONMENT.
- 3. ANY NEW GROWTH OF TREES GROWING NEAR THE SOLAR ENERGY COLLECTING PANELS, BEYOND THE ZONE WHICH WILL BE MAINTAINED AS GRASSLAND AND LOW SHRUBS, WILL BE PERIODICALLY TRIMMED SO THAT NO VEGETATION WILL SHADE THE PANELS. THE TRIMMING WILL BE SUBJECT TO THE RESTRICTIONS OF STATE AND FEDERAL WETLAND PROTECTIONS, AND ANY AGREEMENTS OR PERMITS IN PLACE FOR THE PROJECT.

TRAFFIC STATEMENT

1. FOLLOWING CONSTRUCTION, MINIMAL TRAFFIC WILL BE ACCESSING THE FACILITY. IT IS ANTICIPATED THAT A SMALL PICKUP TRUCK OR LANDSCAPER'S TRUCK AND TRAILER WOULD ACCESS THE FACILITY 2-4 TIMES PER YEAR TO PERFORM ROUTINE MAINTENANCE AS SPECIFIED ABOVE. THE PROJECTED TRAFFIC WILL HAVE NO IMPACT ON TRAFFIC VOLUMES OR TRAFFIC PATTERNS IN THE AREA OF THE PROJECT.

----------------EXISTING INDEX CONTOUR X 98.8 EXISTING SPOT GRADE PROPOSED SPOT GRADE EXISTING PROPERTY LINE PROPOSED PROPERTY LINE ----- EXISTING ABUTTER PROPERTY LINE EXISTING MONUMENT PROPOSED MONUMENT /////////// PROPOSED BUILDING EXISTING BUILDING ----- EXISTING EDGE OF PAVEMENT ----- PROPOSED EDGE OF PAVEMENT CURB TYPE PROPOSED CURB CURB TYPE EXISTING CURB SIDEWALK TYPE EXISTING SIDEWALK SIDEWALK TYPE PROPOSED SIDEWALK ---- EXISTING EDGE OF DRIVES PROPOSED EDGE GRAVEL DRIVES EXISTING WOOD ROAD EXISTING TREELINE PROPOSED LIMIT OF CLEARING × — EXISTING FENCE LINE PROPOSED FENCE LINE EXISTING GUARDRAIL PROPOSED GUARDRAIL WALL TYPE PROPOSED WALL COCCOCCOCCO EXISTING STONEWALL EXISTING RETAINING WALL PROPOSED RETAINING WALL PROPOSED RAILROAD EXISTING RAILROAD ----- EXISTING SETBACK LINE ---- PROPOSED SETBACK LINE — — — — EXISTING EASEMENT LINE ---- PROPOSED EASEMENT LINE ---- PROPOSED ZONING BOUNDARY ----- EXISTING ZONING BOUNDARY EXISTING RIP RAP PROPOSED RIP RAP EXISTING SOIL BORING LOCATION EXISTING TEST PIT LOCATION PROPOSED TEST PIT LOCATION EXISTING SIGN POST PROPOSED SIGN POST EXISTING LIGHT POLE PROPOSED LIGHT POLE EXISTING UTILITY POLE PROPOSED UTILITY POLE EXISTING GUY POLE PROPOSED GUY POLE EXISTING CATCH BASIN PROPOSED CATCH BASIN EXISTING DRAIN MANHOLE PROPOSED DRAIN MANHOLE EXISTING FLARED END PROPOSED FLARED END EXISTING SEWER MANHOLE PROPOSED SEWER MANHOLE EXISTING WATER MANHOLE PROPOSED WATER MANHOLE EXISTING HYDRANT PROPOSED HYDRANT EXISTING WATER GATE VALVE PROPOSED WATER GATE VALVE 0 *CS* EXISTING CURB STOP PROPOSED CURB STOP EXISTING WELL LOCATION PROPOSED WELL LOCATION EXISTING ELECTRIC MANHOLE PROPOSED ELECTRIC MANHOLE EXISTING TRANSFORMER PAD PROPOSED TRANSFORMER PAD EXISTING TELEPHONE MANHOLE PROPOSED TELEPHONE MANHOLE > <PROPOSED CONTROLLER CABINET EXISTING CONTROLLER CABINET O GG EXISTING GAS GATE o GG PROPOSED GAS GATE SIZE & TYPE EXISTING DRAIN LINE SIZE & TYPE PROPOSED DRAIN LINE SIZE & TYPE PROPOSED SEWER LINE SIZE & TYPE ___ EXISTING SEWER LINE SIZE & TYPE PROPOSED WATER LINE SIZE & TYPE EXISTING WATER LINE SIZE & TYPE EXISTING GAS LINE SIZE & TYPE PROPOSED GAS LINE CONDUIT SIZE PROPOSED ELECTRIC LINE CONDUIT SIZE EXISTING ELECTRIC LINE TYPE ____ PROPOSED CABLE T.V. & TELEPHONE ---- EXISTING CABLE T.V. & TELEPHONE EXISTING SEPTIC SYSTEM LOCATION PROPOSED SEPTIC SYSTEM LOCATION EXISTING WETLAND LINE PROPOSED WETLAND REPLICATION AREA PROPOSED SILTATION CONTROL EXISTING WETLAND FLAG LOCATION ____LOC __ PROPOSED LIMIT OF CLEARING ---- EXISTING BUFFER LINE ----- EXISTING RIVERFRONT LINE EXISTING STRUCTURE TO BE DEMOLISHED EXISTING FLOOD ZONE LINE (R&D) REMOVE & DISPOSE EXISTING WATER BODY (R&R) REMOVE & RESET EXISTING EDGE OF LEDGE ADJUST TO GRADE (AG) (AB) ABANDON ABANDON IN PLACE

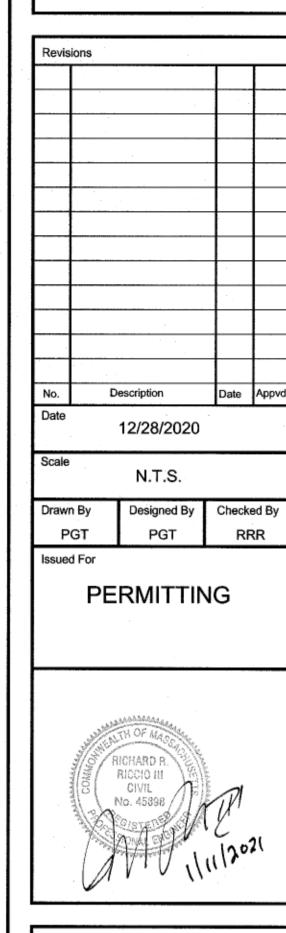
LEGEND

PROPOSED

EXISTING

TIELD -NGINEERING CO., INC. CONSULTING ENGINEERS

11D INDUSTRIAL DRIVE P.O. BOX 1178 MATTAPOISETT, MA 02739 TEL: (508) 758-2749 FAX: (508) 758-2849



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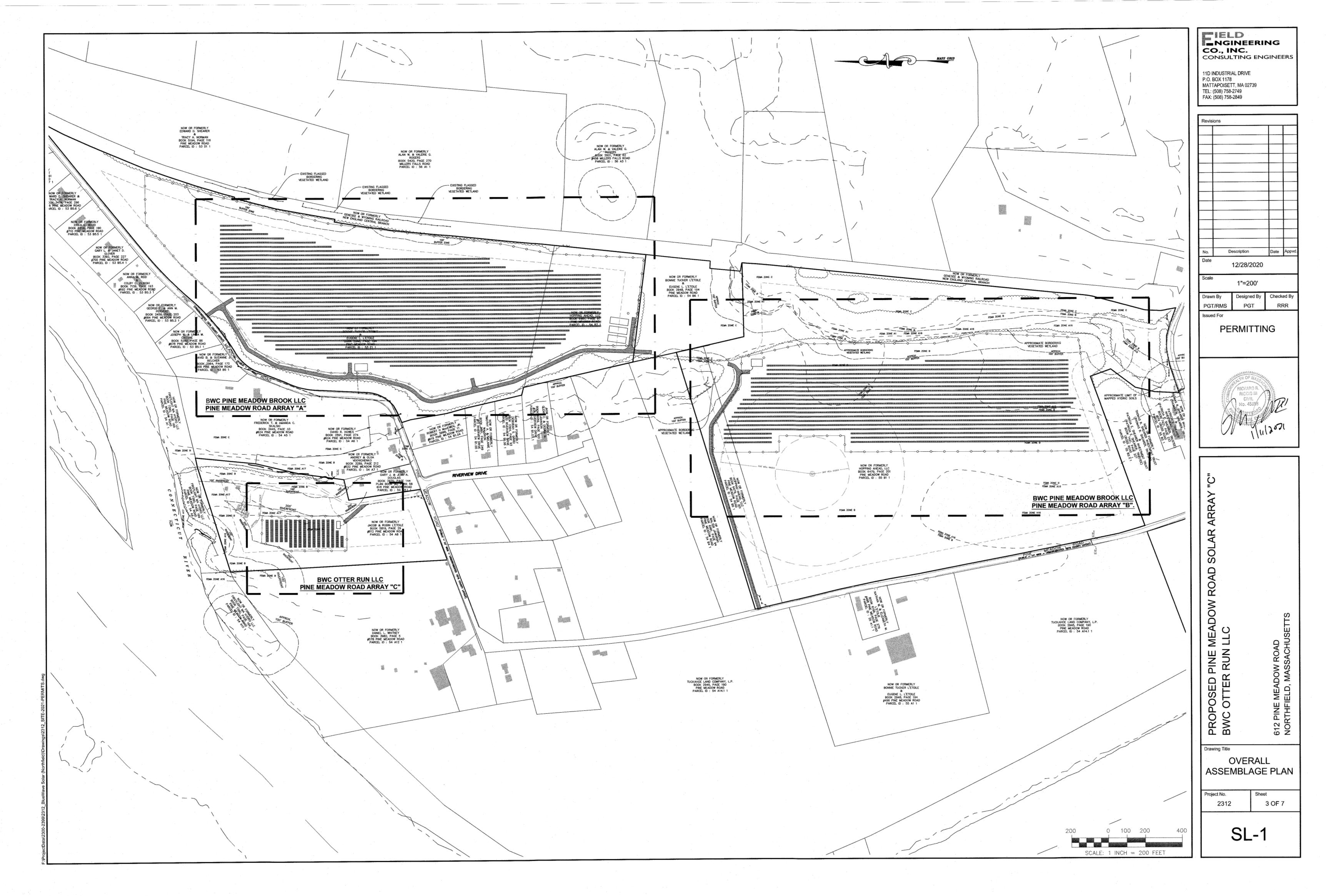
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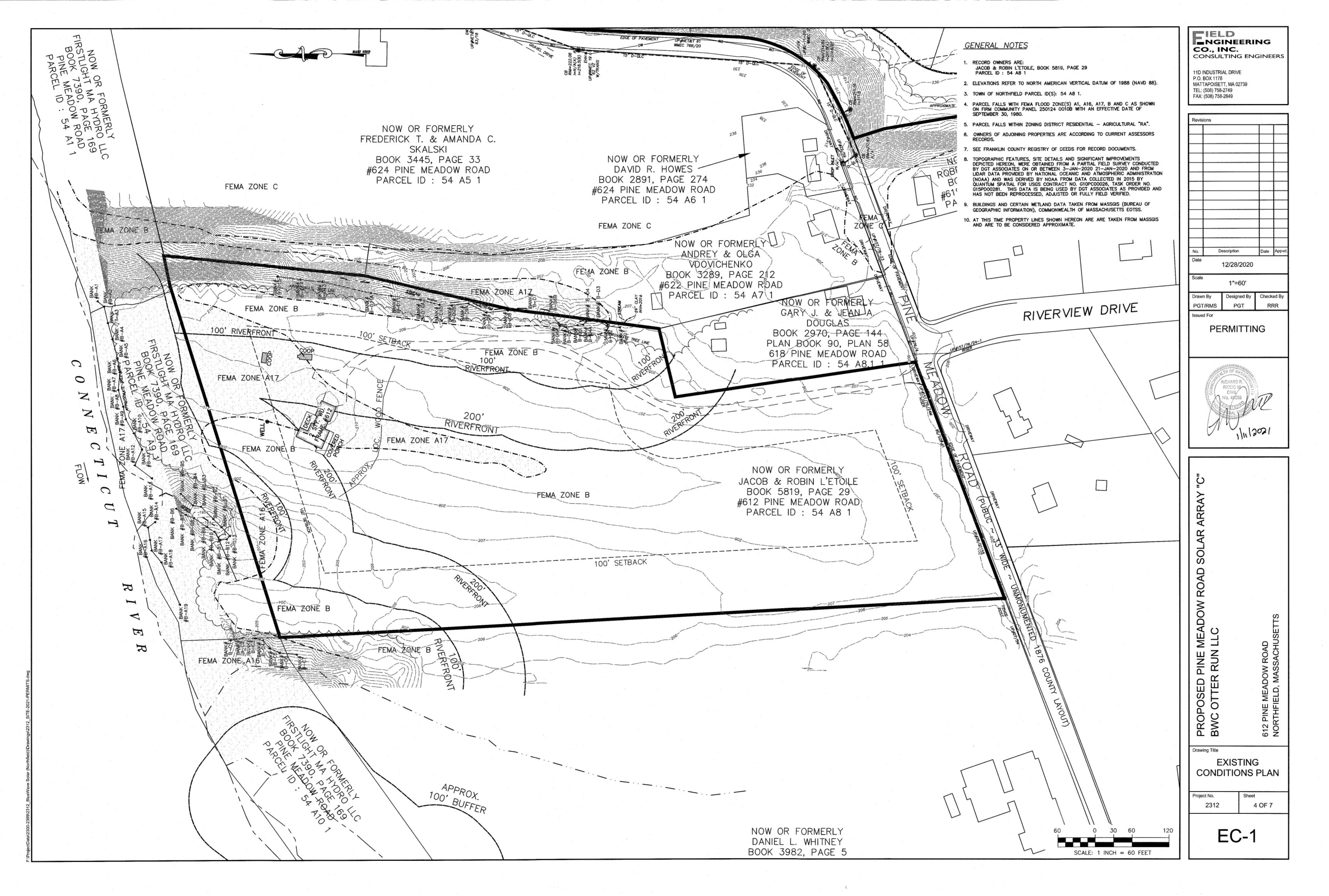
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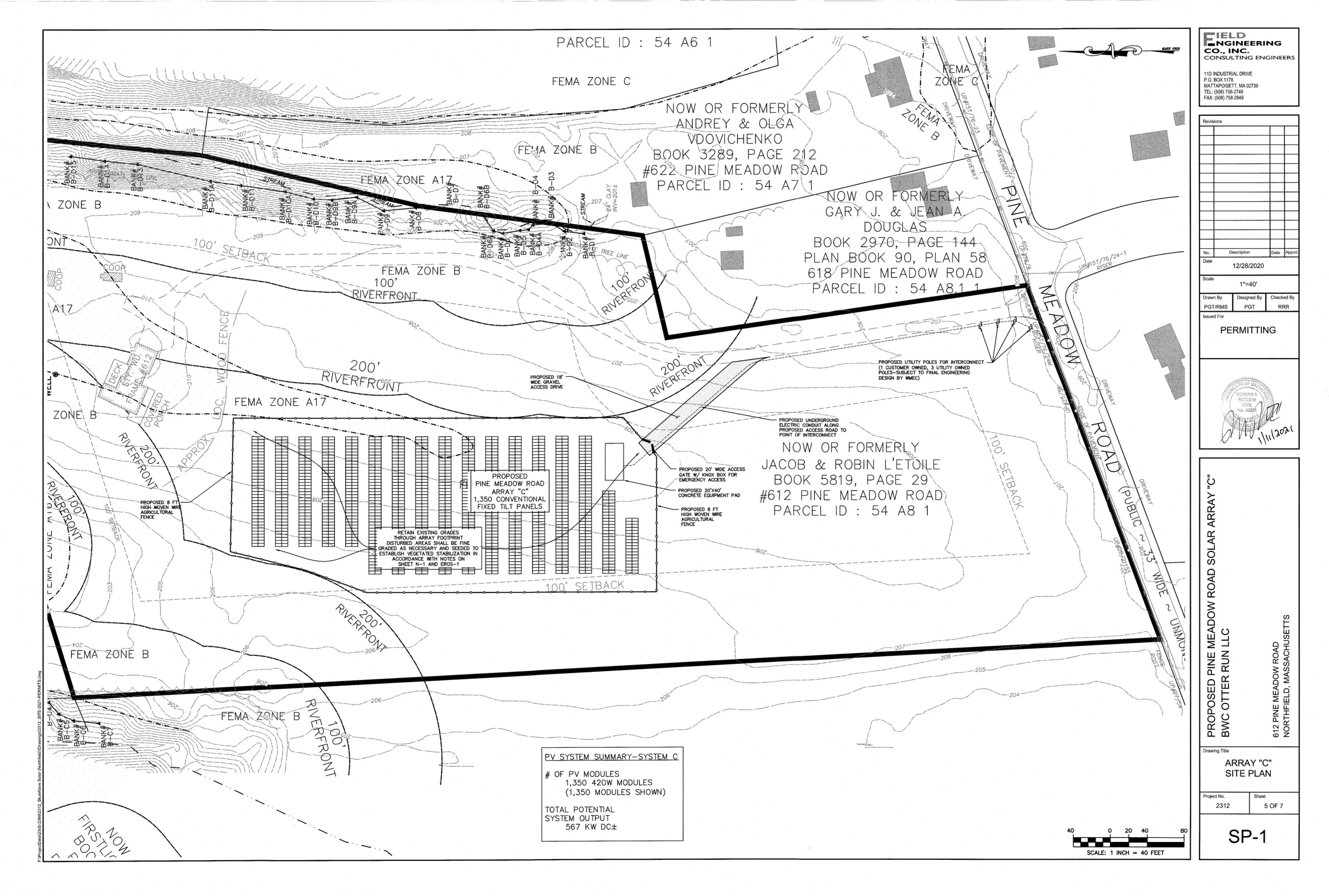
Drawing Title NOTES & LEGEND

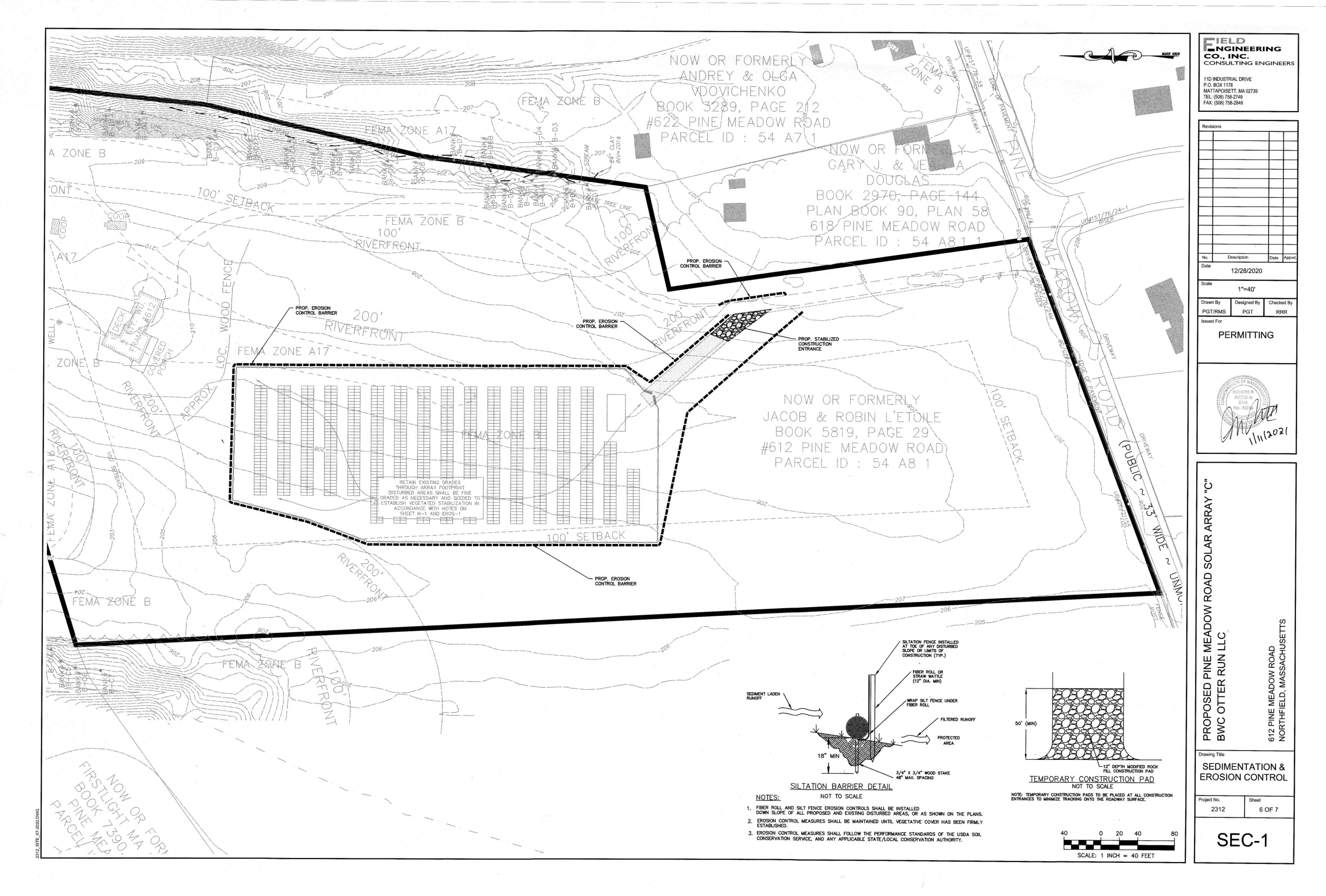
Project No. Sheet 2 OF 7 2312

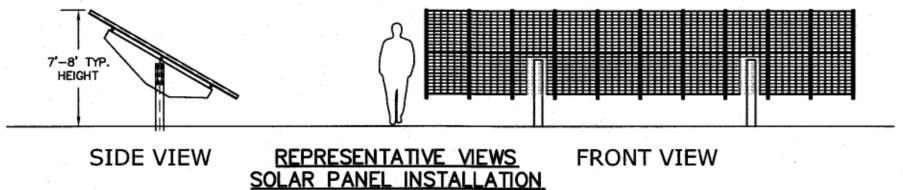
N-1











NOT TO SCALE



STEEL FOUNDATION POST

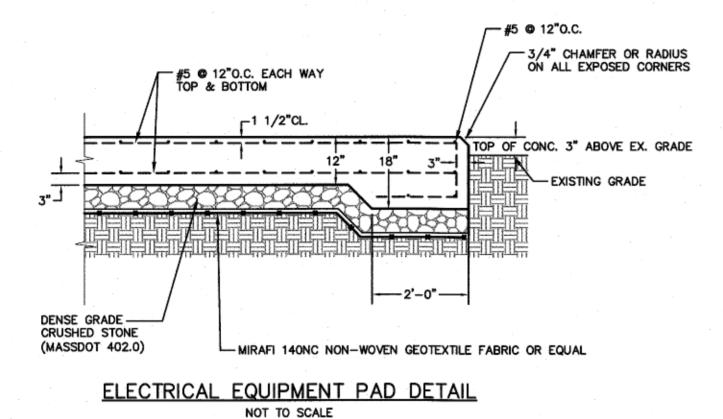
FOLLOWING FINAL

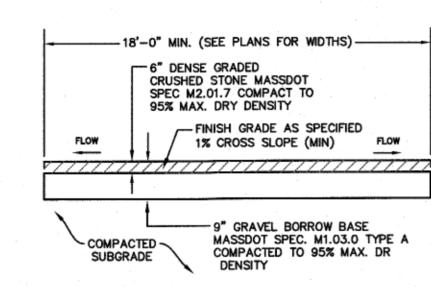
(SIZE TO BE DETERMINED -

GEOTECHNICAL ANALYSIS)

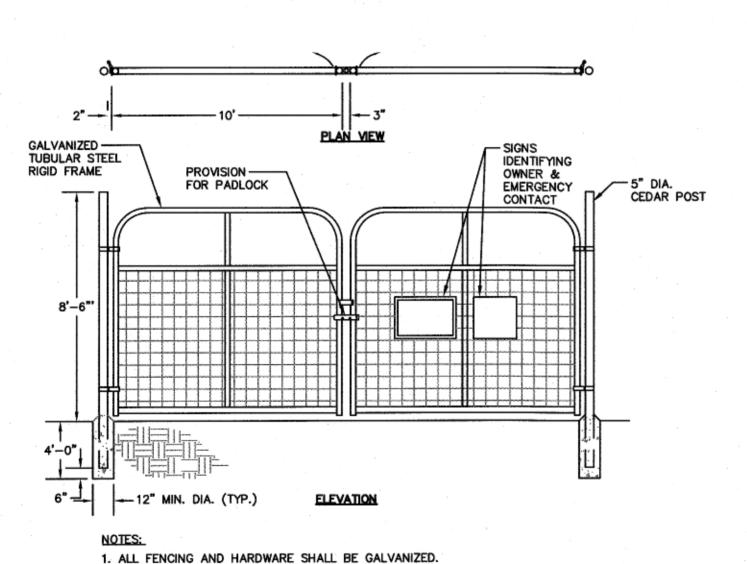
TYPICAL FOUNDATION DETAIL NOT TO SCALE

APPROX 12'

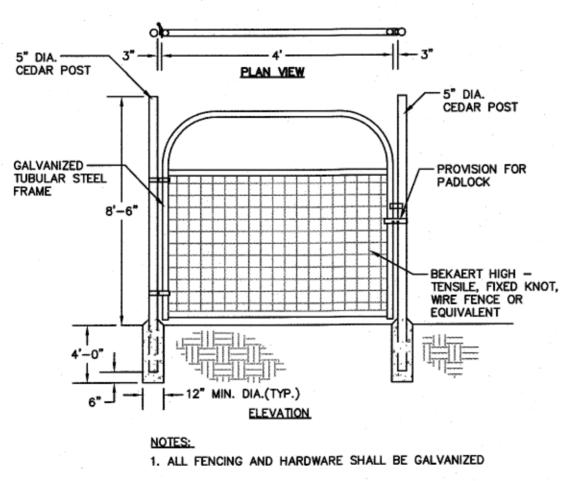




GRAVEL ACCESS ROAD SECTION
NOT TO SCALE

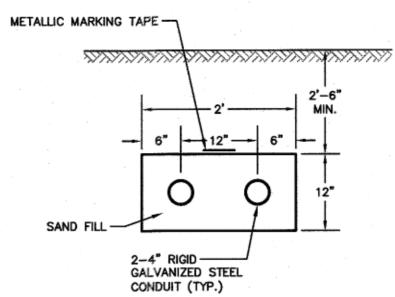


BY THE FIRE DEPT.



2. CONCRETE ENCASEMENT AT END & GATE POSTS ONLY.
3. GATE SHALL BE EQUIPPED WITH KNOX BOX OR SIMILAR AS REQUESTED 4-FOOT PERSONNEL GATE NOT TO SCALE 20-FOOT WIDE ACCESS GATE

NOT TO SCALE



 COORDINATE EXACT DIMENSIONS AND LOCATIONS
WITH SOLAR PANEL VENDOR PRIOR TO CONSTRUCTION
 REVIEW AND COORDINATE MATERIALS AND SPECIFICATIONS ON ELECTRICAL CONDUIT WITH NATIONAL GRID PRIOR TO CONSTRUCTION.

SOLAR ARRAY 612 PINE MEADOW ROAD THIS EQUIPMENT IS OWNED AND OPERATED

— 24"(MIN.) —

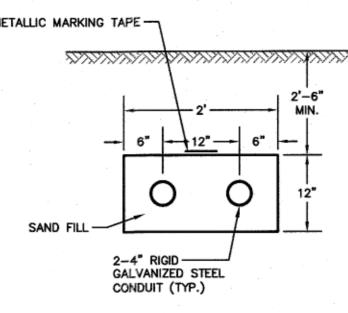
BY BWC OTTER RUN, LLC IN CASE OF EMERGENCY CALL 911 AND (617) 209-3122 X 112

SITE IDENTIFICATION SIGN NOT TO SCALE

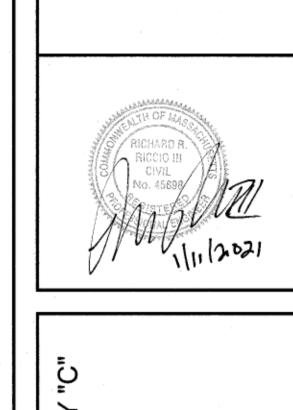
NOTES:

SIGN SHALL BE PLACED ON A PERMANENT POST LOCATED AT THE DRIVEWAY ENTRANCE TO THE PROJECT SITE
 SIGN SHALL BE UPDATED WITH NEW OWNER INFORMATION UPON

TRANSFER OF OWNERSHIP OF PROJECT SITE SIGN SHALL BE A MAXIMUM SIZE OF 4 SQUARE FEET AND CONFORM TO THE TOWN OF NORTHFIELD FIRE DEPARTMENT REQUIREMENTS.



2 CONDUIT UTILITY DUCT BANK NOT TO SCALE



Description

12/28/2020

AS NOTED

Designed By

PGT

PERMITTING

PGT

Issued For

Checked By

CIELD

CO., INC.

11D INDUSTRIAL DRIVE

MATTAPOISETT, MA 02739

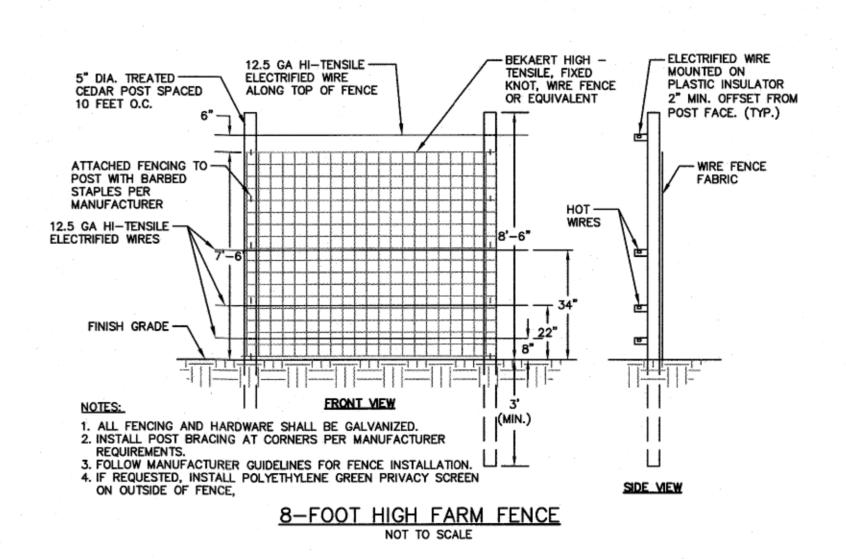
P.O. BOX 1178

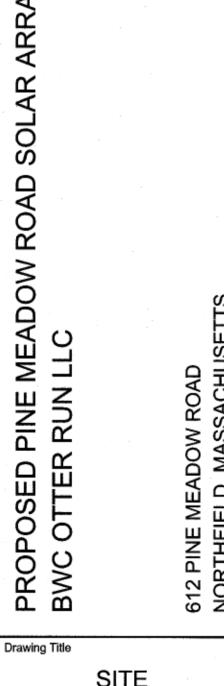
TEL: (508) 758-2749

FAX: (508) 758-2849

-NGINEERING

CONSULTING ENGINEERS





Drawing Title

SITE DETAILS

DET-1

7 OF 7